

Questions from Proposer's Day 20 June 2007, Los Angeles, CA

Q1. Are we free to propose different Go/No Go metrics that better characterize our proposed technical solutions?

A1. Yes, see paragraph 2.3.3 from the Proposer's Information Pamphlet (PIP)

Q2. Is the \$1.00 goal a price goal or a cost goal?

A2. The \$1.00 cost per tape is a cost to the government goal.

Q3. Is there a standard proposal format required?

A3. Yes, see section 4.2 of the PIP.

Q4. The price of \$1.00 per tape for 7 days of operation is very aggressive. Would the government consider a \$5.00 per tape cost for a month of operation? This seems to be, on a daily basis, an approximately equivalent cost.

A4. The \$1.00 for 7 days of operation is the maximum value. If the tape lasts longer but costs more, the government will consider what is the best value to the government. Remember, an objective of this program is to produce very inexpensive, and therefore disposable, temporary medical sensors.

Q5. It was mentioned in one of the briefings that AA-size batteries should be used. For clarification, is the AA-size battery for the Sensor Tape or for the Handheld Interrogation & Control Unit.

A5. The AA-size battery is desired for the Handheld Interrogation & Control Unit.

Q6. Can small rectangles be included in the patch?

A6. Yes, as long as it meets the requirements stated in the Proposers Information Pamphlet (PIP).

Q7. The 200 meter line of sight range will be very challenging. For our link budgets, can we neglect the effects of walls and the like and assume just free space propagation losses?

A7. Yes.

Q8. During the overview briefing, it was mentioned that the blast dosimeter should measure heat. The BAA and PIP make no reference to having the blast dosimeter measuring the heat of the blast.

A8. The blast dosimeter is not required to measure heat.

Q9. What is the required response rate for the pressure pulse (shock wave) measurement? Is it 200 kHz?

A9. Yes. 200 kHz is an appropriate response rate to the pressure pulse (for example, assume two data points pass a 10 cm sensor and 1000 m/s shock wave).

Q10. Is it within scope of the BAA that the sensors send information to an “SDA-type” unit, which then sends the signal 200 meters, or does the sensor patch (i.e., heart rate) have to communicate directly over 200 meters distance?

A10. The communications distance is 200 meters between the patient and the Handheld Interrogation & Control Unit. If multiple tapes are part of the proposed design, then at least one of the tapes should collect the information from the other sensor tapes on that patient and relay it no less than 200 meters to the Handheld device. Also note, the DAGR/SDA discussed at Proposer’s Day is an example of a device that is being fielded and may be a suitable interface, but is not a required interface. The proposer may build a Handheld interface that makes the most sense for the proposed system design.

Q11. Is the 1-inch minimum bend radius 1-axis flexure or multi-axial?

A11. The tape should be flexible enough to bend around a 1-inch diameter cylindrical pipe.

Q12. Will the blast dosimeter developed for Sensor Tape be used in the Prevent Program?

A12. The Prevent Program is intended to characterize Traumatic Brain Injury (TBI). The results from the characterization of TBI may be used to set the threshold values for

warfighter exposure in the future. Sensor Tape will enable monitoring of the cumulative effects of blast exposure.

Q13. If multiple patches are proposed, do all have to meet the 200 meter range goal or can a single patch be the communications unit as long as it can collect data from the other sensor tapes?

A13. The communications distance is from the patient wearing the patch or patches to the handheld unit. The proposer is free to select the communications architecture that best suits the proposed technical design and makes the most sense for use by the combat medical care community in getting the sensed information from the patient to the handheld unit.

Q14. What is the acceptable latency for the sensor tape patches to alert caregivers when measured parameters fall outside the prescribed values? Is this modality specific (i.e., will the latency be different for example for an out of bounds reading on respiration compared to the latency reporting for pulse, oxygen level, etc.)?

A14. The Proposer should consider medical requirement in designing the overall system. It is reasonable to assume that data acquisition has some urgency, even if the patient is considered stable or stabilized. Medical professionals would certainly prefer near-real time reporting advantageous. The overall depth and understanding of the proposed technical solution is an evaluation criteria.

Q15. This is an extremely complicated and aggressive program that cuts across many disciplines. Would the government consider extending the due date of the proposal in order to give industry more time to prepare a thorough response?

A15. It is possible that the due date may be extended. Please check for updates to the BAA.

Q16. Is the government looking for solutions that are 100% printed?

A16. No. The government is looking for a system design that best suits the performance and cost goals. Print-on electronics may be one way of achieving the cost goal, but not necessarily the only way.

Q17. Is there interest in a fully closed loop “tape” that senses trauma and provides treatment such as medicine or pain killers?

A17. The PIP makes provisions for industry to propose other novel low-cost disposable medical sensing devices that industry believes would be of value to the Department of Defense.

Q18. Would a proposal for a single system (i.e., medial monitoring) be viable for funding?

A18. Yes. There is no requirement to propose a technical system solution for both the blast dosimeter and the medical monitoring sensor tapes. Industry may propose either or both systems. Note, however, that a full system must be proposed and not just a component to a system such as a pressure transducer or the like.

Q19. What is the expected maximum patient density to be monitored within the 200 meter communications range?

A19. Proposers should consider medical requirement in designing the overall system. It is reasonable to assume that in a situation of mass casualties many patients may lie within this distance. Medical professionals would certainly prefer to be able to treat as many patients as possible with one Handheld Interrogation & Control Unit. The overall depth and understanding of the proposed technical solution is an evaluation criteria.

Q20. If multiple sensor tapes are proposed to monitor all vital signs desired, must each sensor communicate the 200 meter distance or would a body network suffice to collect information from the other sensors and then communicate all information to the handheld?

A20. The communications distance is between the patient and the handheld unit. The communications architecture is at the discretion of the proposer.

Q21. For the medical tag alarm altering requirement, is the sensor processing and thresholding to be done on the patch or the handheld device?

A21. This is a design trade that will be unique to the proposers solution. The Sensor Tape must alert the caregiver of an out of bounds reading at both the Handheld and at the patient. The proposer must determine how best to accomplish this.

Q22. In mass casualty triage applications, can it be assumed that patients will be positioned in a manner feasible to RF communications (i.e., not on their stomachs with the Sensor Tape underneath them)?

A22. For link budget calculations it may be useful to assume that the patients are all at some fixed height above the ground, say for example 50 cm or 1 m, and the handheld is also at some fixed height above ground.

Q23. Does each Sensor Tape need to be uniquely associated with the soldier or would a “process” approach suffice to insure proper tracking of a soldier’s blast exposure?

A23. The blast dosimeters should be read-out on a periodic basis to a file that belongs to the soldier wearing the monitor.

Q24. Should consideration be given to a solution that deters a soldier from “beating the system” by intentionally exposing the blast dosimeter to blasts while not on the soldier?

A24. The government is looking for the most novel system design that meets the stated goals.

Q25. Will the RF communications for the Sensor Tape be: continuous, periodic, event driven, or when interrogated?

A25. This is a design trade for the proposed technical system solution.
